

## REMARKS

Claims 14-28 are pending in the present application. Claims 14, 19 and 20 were amended in this response. No new matter has been introduced as a result of the amendments.

Claims 16 and 22-26 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Claims 19 and 20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In light of the present amendments, applicants submit that the rejection has been traversed. Withdrawal of the rejection is earnestly requested.

Claims 14, 15, 17, 18, 21 and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by *Jenson et al.* (US Patent 4,973,969).

Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Jenson et al.* (US Patent 4,973,969) in view of *Cuzin et al.* (US Patent 4,933,634).

Claim 20 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Jenson et al.* (US Patent 4,973,969) in view of *Saxe et al.* (US Patent 5,144,525).

Claim 28 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Jenson et al.* (US Patent 4,973,969) in view of *Sevenhans et al.* (US Patent 5,528,637). Applicants traverse these rejection. Favorable reconsideration is respectfully requested.

The cited art, alone or in combination, fails to disclose the features of “at least one multiplier which calculates a value of an autocorrelation function of the baseband signal by multiplication of a value of the baseband signal by a delayable value of the baseband signal, wherein the value of the autocorrelation function indicates the presence of polarization mode dispersion” as recited in claim 14. The configuration recited in the present claims addresses in part the use of adaptive polarization mode dispersion (PMD) compensators which are inserted in a transmission path. To drive these compensators, PMD distortions must be detected in the optical receiver. By relying on the configuration recited in the present claims an effective detection may be realized even for relatively large values of the differential group delay without being subject to intrinsic distortions through group delay distortions.

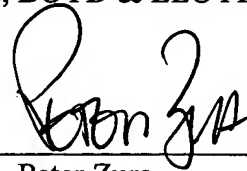
In contrast, *Jenson* teaches a method and apparatus for automatically, and continuously sensing for coherent frequency bursts, where, once a burst is detected, the approximate frequency and duration is determined and passed to a block sampler of a DSP (col. 1, lines 59-65). A digital signal is provided to an auto-correlator network having a series of delays and a plurality of exclusive OR gates (FIG. 2), wherein a double clipped signal is multiplied by the various delayed digital signals and the auto-correlator network generates signals which are an indication of the general dependence of the values of the data at one time on the values at another time. (col. 2, lines 5-14). While *Jenson* performs autocorrelation on data values in a frequency burst, *Jenson* is wholly silent on using autocorrelation to determine the presence of polarization mode dispersion, as recited in the present claims. For at least these reasons, Applicant submits that the rejection under 35 U.S.C. §102 is improper and should be withdrawn. Furthermore, the remaining cited documents are silent regarding these features as well, and do not solve the deficiencies of *Jenson*, discussed above. Accordingly, the rejections under 35 U.S.C. §103 should be withdrawn as well.

For at least these reasons, Applicants submit that claims 14-28 are in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If any fees are due in connection with this application as a whole, the office is hereby authorized to deduct said fees from Deposit Account No.: 02-1818. If such a deduction is made, please indicate the Attorney Docket Number (0112740-387) on the account statement.

Respectfully submitted,

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